

# CONSULTATION PAPER

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## Proposals for the Implementation of Basel II in Singapore - Phase 1

MAS

Monetary Authority of Singapore

## PREFACE

In June 2004, the Basel Committee on Banking Supervision (“BCBS”) issued its report on “International Convergence of Capital Measurement and Capital Standards: A Revised Framework” (commonly known as Basel II).

This consultation paper introduces the structure of the standards and guidelines that MAS will be issuing to implement Basel II, as well as the general requirements pertaining to scope of application, capital adequacy ratios, transitional arrangements and definition of capital. The paper also proposes standards for the simpler operational risk approaches under Basel II.

MAS invites comments from Singapore-incorporated banks and other interested parties. Please note that any comments received may be made public unless confidentiality is specifically requested. Electronic submission is encouraged.

The public consultation period ends on **9 Sep 2005**. Please direct comments to:

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## INTRODUCTION

In June 2004, the Basel Committee on Banking Supervision (“BCBS”) issued its report on “International Convergence of Capital Measurement and Capital Standards: A Revised Framework” (commonly known as Basel II). An important objective of implementing Basel II is to foster continual improvements in the risk management practices of Singapore-incorporated banks (“Reporting Banks”). This in turn will contribute to a safe and sound financial system and enhance the long-term competitiveness of the Reporting Banks.

2 To that end, MAS has been working with the Reporting Banks to implement Basel II in tandem with the G-10 countries. Whilst MAS has been in regular discussion with reporting banks to set out our expectations and requirements for Basel II implementation and to hear their feedback and issues, we are now entering the process of formalising the requirements and seeking public feedback.

3 As the standards and requirements for Basel II implementation are extensive, MAS will consult on the proposed requirements in phases over the next year. This Phase 1 consultation paper introduces the structure in which the standards and requirements will be set out, as well as the general requirements pertaining to scope of application, capital adequacy ratios, transitional arrangements and definition of capital. The paper also proposes standards for the simpler operational risk approaches under Basel II.

## **NEW NOTICE ON CAPITAL RULES FOR REPORTING BANKS**

4 MAS will implement Basel II by way of a new notice that will set out the capital rules applicable to Reporting Banks. The new notice will replace MAS Notice to Banks 637, which will be repealed upon implementation of Basel II. Other bank capital requirements currently set out in MAS Notices to Banks 627, 628 and 630<sup>1</sup> will also be migrated to the new notice to create a single comprehensive rulebook.

5 The proposed structure of the new notice (in Appendix A) mirrors Basel II's three-pillar framework. Pillar 1 specifies minimum capital adequacy ratios for Reporting Banks and the methods that Reporting Banks must use to calculate these ratios. Pillar 2 sets out MAS' expectations in respect of a Reporting Bank's internal assessment of whether it has adequate capital to cover its exposures to all risks. Pillar 3 specifies the minimum disclosure requirements for a Reporting Bank in relation to its capital adequacy, with a view to fostering market discipline.

6 This consultation paper seeks feedback on the draft requirements in Parts I to VI and Divisions 1 to 4 of Part IX of the new notice (in Appendix B). Basel II contains various national discretions for supervisors to exercise, taking into account relevant domestic factors. Appendix C sets out MAS' proposed exercise of national discretions relating to those parts of the new notice being consulted on. The key areas set out for consultation are:

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<sup>1</sup> MAS Notice to Banks 627 specifies the capital treatment for credit derivatives. MAS Notice to Banks 628 set out rules for asset securitisations by banks. MAS Notice to Banks 630 regulates private equity and venture capital investments by banks.

- a) Part I – Introduction: This part introduces the three-pillar framework and sets out MAS' expectation that a Reporting Bank should select the Pillar One approaches that are commensurate with the complexity and sophistication of its business and operations.
- b) Part II – Definitions of Terms: This part explains the terms used in the proposed new notice.
- c) Part III – Scope of Application: MAS will continue to require capital adequacy requirements to be met on a solo and consolidated basis. The requirements are the same as those in the existing MAS Notice 637, but involve the exercise of Basel II national discretions by MAS. (Please see paragraphs 24 & 27, 25 and 30 at Appendix C.)
- d) Part IV – Minimum Capital Adequacy Ratios: The requirements are the same as those under the existing MAS Notice 637.
- e) Part V – Transitional Arrangements: MAS will be implementing the Basel II capital floors for Reporting Banks adopting the internal ratings-based approach to credit risk during the transition period from 1 Jan 2007. The capital floors will not be reduced automatically but will depend on substantive and continual progress in Basel II implementation by the Reporting Bank.
- f) Part VI – Definition of Capital: Most of the requirements here are similar to those in MAS Notice 637. MAS will implement the Basel II requirement for deductions from capital to be

effected through equal deductions from Tier 1 and Tier 2 Capital. Reporting Banks will be allowed to recognise excess provisions as Upper Tier 2 Capital subject to a limit. (Please see paragraphs 43 at Appendix C.)

- g) Part IX – Operational Risk: This part sets out the simpler approaches (i.e. Basic Indicator Approach and Standardised Approach) for calculating capital requirements for operational risk. Under the Standardised Approach, MAS will allow negative capital charges for certain business lines to offset positive capital charges for other business lines.

## **NEXT STEPS**

7 MAS will issue the drafts of Divisions 1 to 4 of Part VII on Credit Risk for comment later this year. For the remaining parts of the new notice, as standard-setting work by BCBS and other standard setting bodies (e.g. the International Accounting Standards Board) are ongoing, MAS is following developments in these areas closely and plans to issue draft rules for consultation next year.

**Appendix A****STRUCTURE OF NEW NOTICE**

		In this consultation paper
Part I	Introduction	√
Part II	Definitions	√
Part III	Scope of Application	√
	<b>PILLAR 1 – MINIMUM CAPITAL REQUIREMENTS</b>	
Part IV	Minimum Tier 1 and Total Capital Adequacy Ratios	√
Part V	Transitional Arrangements	√
Part VI	Definition of Capital	√
Part VII	Credit Risk	
Division 1	Introduction	
Division 2	Exposure Measurement	
Division 3	Standardised Approach	
Division 4	Internal Ratings-based Approach	
Division 5	Equities	
Division 6	Securitisation	



**Part VIII Market Risk**

- Division 1 Introduction
- Division 2 Standardised Approach
- Division 3 Internal Models Approach

**Part IX Operational Risk**

- Division 1 Introduction ✓
- Division 2 Basic Indicator Approach ✓
- Division 3 Standardised Approach ✓
- Division 4 Alternative Standardised Approach ✓
- Division 5 Advanced Measurement Approaches

**PILLAR 2 – SUPERVISORY REVIEW  
PROCESS**

Part X Banks' Internal Capital Adequacy Assessment  
Process

Part XI MAS' Supervisory Review

**PILLAR 3 – MARKET DISCIPLINE**

Part XII Public Disclosure Requirements

Part XIII Regulatory Reporting

**Appendix B**

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**DRAFT TEXT OF MAS NOTICE TO BANKS 6XX:  
RISK-BASED CAPITAL ADEQUACY  
REQUIREMENTS FOR BANKS INCORPORATED  
IN SINGAPORE**

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**PART I: INTRODUCTION**

1.1 This Notice is issued pursuant to section 10(2) of the Banking Act (Cap. 19) ["Banking Act"] and applies to all banks incorporated in Singapore ("Reporting Banks").

1.2 This Notice establishes the minimum capital adequacy ratios for a Reporting Bank and the methodology a Reporting Bank shall use for calculating these ratios ("Pillar 1"). While this Notice provides a range of approaches for calculating minimum capital requirements, a Reporting Bank is expected to adopt the approaches that are commensurate with the complexity and sophistication of its businesses and operations. A Reporting Bank is also encouraged to move toward the risk management practices embodied in the more advanced approaches although it may not be ready to adopt them fully for the purpose of computing minimum capital requirements.

1.3 In addition to complying with the minimum capital requirements in this Notice, a Reporting Bank should consider whether it has adequate capital to cover its exposure to all risks. This Notice sets out the expectations of the Authority in respect of the internal capital adequacy assessment of a Reporting Bank ("Pillar 2") which are non-mandatory.

1.4 This Notice also specifies the minimum disclosure requirements for a Reporting Bank in relation to its capital adequacy ("Pillar 3"), with a view to fostering market discipline.

1.5 The requirements and guidelines set out in this Notice are based on the capital adequacy framework set out in the report "International Convergence of Capital Measurement and Capital Standards" ("the First Report") issued by the Basel Committee on Banking Supervision ("BCBS") in July 1988 and subsequent amendments to the First Report<sup>1</sup> and the report "International Convergence of Capital Measurement and Capital Standards: A Revised Framework" ("the Second Report") issued by BCBS in June 2004. The Authority will review the requirements and guidelines set out in this Notice from time to time, taking into account, among other things, any amendments to the Second Report issued by BCBS.

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<sup>1</sup> The First and Second Reports and subsequent amendments to the First Report may be found at the following website: <http://www.bis.org>.

**PART II: DEFINITIONS**

2.1 The definitions of the terms used in this Notice are set out in the Reference Glossary at Annex 2A.

**Annex 2A****REFERENCE GLOSSARY**

$\alpha$	in relation to the BIA, means 15%;
$\beta$	in relation to the SA(OR) and the ASA, means the percentages set out for each business line in Table 1 of Part IX;
Accounting Standards	has the same meaning as in section 4(1) of the Companies Act (Cap 50);
advanced measurement approach or AMA	means the approach for calculating operational RWA set out in Division 5 of Part IX or, if the reference is to any regulatory requirements of, or administered by, a bank regulatory agency other than the Authority, whatever corresponds to that approach under those requirements;
alternative standardised approach or ASA	means a variant of the SA(OR) as set out in Division 4 of Part IX or, if the reference is to any regulatory requirements of, or administered by, a bank regulatory agency other than the Authority, whatever corresponds to that approach under those requirements;
associate	has the same meaning as in section 7(5) of the Companies Act (Cap 50);
banking group	means the Reporting Bank and its banking group companies;
basic indicator approach or BIA	means the approach for calculating operational RWA set out in Division 2 of Part IX or, if the reference is to any regulatory requirements of, or administered by, a bank regulatory agency other than the Authority, whatever corresponds to that approach under those requirements;
BCBS	means the Basel Committee on Banking Supervision;
capital investments	in relation to a Reporting Bank, means all exposures of a capital nature, including— <ul style="list-style-type: none"><li>(a) any ordinary share;</li><li>(b) any preference share;</li><li>(c) any instrument treated as regulatory capital in relation to any financial institution approved, licensed, registered or otherwise regulated by a regulatory agency;</li><li>(d) any lending on non-commercial terms or which is not at arm's length; and</li><li>(e) any guarantee issued to third parties in respect of its subsidiaries and major stake companies on non-</li></ul>

commercial terms or which is not at arm's length.

credit RWA	means the risk weighted assets for credit risks determined in the manner set out in Part VII;
Deductions from Tier 1 Capital	means the sum of the items set out in paragraph 6.6;
Deductions from Upper Tier 2 Capital	means the sum of the items set out in paragraph 6.18;
dilution	means any reduction in an amount receivable from a counterparty through cash or non-cash credits to the counterparty <sup>2</sup> ;
expected loss or EL	means the ratio of the amount expected to be lost on an exposure arising from a potential default of a counterparty, or dilution, or both over a one year period to the amount outstanding at default;
financial year	has the same meaning as in section 4(1) of the Companies Act (Cap. 50);
internal ratings-based approach or IRBA	means the approach for calculating credit risk-weighted exposure amounts set out in Division 4 of Part VII or, if the reference is to any regulatory requirements of, or administered by, a bank regulatory agency other than the Authority, whatever corresponds to that approach under those requirements;
IRBA adoption date	means the date from which a Reporting Bank begins using the IRBA for calculating any part of its regulatory capital requirements;
major stake company	in relation to a Reporting Bank, means any company in which the Reporting Bank is deemed, by virtue of section 32(7) of the Banking Act to hold a major stake;
market RWA	means the risk-weighted assets for market risks determined in the manner set out in Part VIII;
operational risk	means the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events, including legal risks, but does not include strategic or reputational risk;
operational RWA	means the risk-weighted assets for operational risks determined in the manner set out in Part IX;
PE/VC investments	means PE/VC investments as defined in MAS Notice 630;

<sup>2</sup> Guideline: Examples include offsets or allowances arising from returns of goods sold, disputes regarding product quality, possible debts of the borrower to a receivables obligor, and any payment or promotional discounts offered by the borrower (e.g. a credit for cash payments within 30 days).

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preference share	has the same meaning as in section 4(1) of the Companies Act (Cap. 50);
Reporting Bank	means a bank incorporated in Singapore.
standardised approach to credit RWA or SA(CR)	means the approach for calculating credit risk-weighted exposure amounts set out in Division 3 of Part VII or, if the reference is to any regulatory requirements of, or administered by, a bank regulatory agency other than the Authority, whatever corresponds to that approach under those requirements;
standardised approach to operational RWA or SA(OR)	means the approach for calculating operational RWA set out in Division 3 of Part IX or, if the reference is to any regulatory requirements of, or administered by, a bank regulatory agency other than the Authority, whatever corresponds to that approach under those requirements;
subsidiary	has the same meaning as in section 5 of the Companies Act (Cap. 50);
Tier 1 Capital	means the sum of the items set out in paragraph 6.13;
total eligible provisions or TEP	means the sum of all provisions, including specific and general provisions, that are attributed to credit exposures subject to the IRBA;
Upper Tier 2 Capital subject to Limit	means the sum of the items set out in paragraph 6.13, subject to the limit set out in paragraph 6.17; and
written law	has the same meaning as in section 2 of the Interpretation Act.

**PART III: SCOPE OF APPLICATION**Requirements to Apply at the Solo and Group Levels

3.1 In recognition of the potential non-perfect transferability of capital within a group of related corporations, a Reporting Bank shall comply with the capital adequacy ratio requirements in this Notice at two levels:

- (a) the bank standalone ("Solo") level capital adequacy ratio requirement, which measures the capital adequacy of a Reporting Bank based on its standalone capital strength and risk profile; and
- (b) the consolidated ("Group") level capital adequacy ratio requirement, which measures the capital adequacy of a Reporting Bank based on its capital strength and risk profile after consolidating the assets and liabilities of its subsidiaries and any other company treated as part of the Reporting Bank's group of companies according to Accounting Standards (collectively called "banking group companies"), taking into account any exclusions of certain banking group companies or adjustments provided for under paragraphs 3.2 and 3.3 and Part VI of this Notice.

Non-consolidation of Certain Subsidiaries at the Group Level

3.2 For the purpose of computing the capital adequacy ratio requirement at a Group level, a Reporting Bank shall de-consolidate the assets and liabilities of every subsidiary carrying on insurance business as an insurer ("insurance subsidiary") from the assets and liabilities of the banking group.

3.3 Subject to paragraph 3.2 and Part VI of this Notice, for the purpose of computing the capital adequacy ratio requirement at a Group level, a bank may de-consolidate the assets and liabilities of any subsidiary from the assets and liabilities of the banking group only if such non-consolidation is permitted under the Accounting Standards.



# **PILLAR 1 – MINIMUM CAPITAL REQUIREMENTS**

**PART IV: MINIMUM TIER 1 AND TOTAL CAPITAL ADEQUACY RATIOS**

4.1 A Reporting Bank shall calculate its Tier 1 capital adequacy ratio ("Tier 1 CAR") as follows:

$$\text{Tier 1 CAR} = \frac{\text{Eligible Tier 1 Capital}}{\text{Credit RWA + Market RWA + Operational RWA}}$$

where

$$\text{Eligible Tier 1 Capital} = \text{Tier 1 Capital} - \text{Deductions from Tier 1 Capital}, \text{ subject to Limits on Eligible Tier 1 Capital}$$

4.2 Every Reporting Bank shall calculate its total capital adequacy ratio ("Total CAR") as follows:

$$\text{Total CAR} = \frac{\text{Eligible Total Capital}}{\text{Credit RWA + Market RWA + Operational RWA}}$$

where

$$\text{Eligible Total Capital} = \text{Eligible Tier 1 Capital} + \left( \text{Upper Tier 2 Capital Subject to Limit} - \text{Deductions from Upper Tier 2 Capital} \right)$$

4.3 Every Reporting Bank shall, at all times, maintain at both the Solo and Group levels, the following ratios:

- (a) a Tier 1 CAR of at least 7%;
- (b) a Total CAR of at least 10%.

4.4 A Reporting Bank should consider whether it has adequate capital, over and above the minimum capital requirements set out in paragraph 4.3 above both at the Solo and Group levels, to cover its exposure to all risks.<sup>3</sup>

4.5 In addition to the requirements set out in this Notice, the Authority may, pursuant to section 10(3) of the Banking Act, vary the capital adequacy ratio applicable to a Reporting Bank. The Authority will take into account any relevant risk factor and the internal capital adequacy assessment of a Reporting Bank under paragraph 4.4 above, to ensure that the capital adequacy ratio is commensurate with the overall risk profile of the

<sup>3</sup> For example, a Reporting Bank that has adopted one or more approaches (e.g. IRBA, IMA and/or AMA) that uses the internal risk estimates of the Reporting Bank to calculate minimum capital requirements should consider, among other things, the representativeness of the data that it uses to derive those risk estimates in relation to the current risk profile of the Reporting Bank and apply a margin of conservatism where appropriate.

Reporting Bank. These risk factors include concentration risk, liquidity risk, profitability, and the effectiveness of the Reporting Bank in identifying, measuring, monitoring and managing its risks.

**PART V: TRANSITIONAL ARRANGEMENTS**Capital Floors

5.1 A Reporting Bank that adopts the IRBA shall maintain minimum capital requirements of not less than the higher of the minimum capital requirements calculated using the IRBA and such capital floors as set out in paragraph 5.2.

5.2 The capital floors that are applicable to a Reporting Bank with an IRBA adoption date on or after 1 Jan 2007 but before 1 Jan 2009 are as follows:

	<b>From 1 Jan 2007 to 31 Dec 2007</b>	<b>From 1 Jan 2008 to 31 Dec 2008</b>	<b>From 1 Jan 2009 to 31 Dec 2009 or such longer period as the Authority may notify to a Reporting Bank</b>
IRBA adoption date on or after 1 Jan 2007 but before 1 Jan 2008	95% of minimum capital requirements calculated using the capital rules specified in MAS Notice 637 or such other percentage (not more than 100%) as the Authority may notify to a Reporting Bank	90% of minimum capital requirements calculated using the capital rules specified in MAS Notice 637 or such other percentage (not more than 100%) as the Authority may notify to a Reporting Bank	80% of minimum capital requirements calculated using the capital rules specified in MAS Notice 637 or such other percentage (not more than 100%) as the Authority may notify to a Reporting Bank
IRBA adoption date on or after 1 Jan 2008 but before 1 Jan 2009	N.A.	90% of minimum capital requirements calculated using the capital rules specified in MAS Notice 637 or such lower percentage as the Authority may notify to a Reporting Bank	80% of minimum capital requirements calculated using the capital rules specified in MAS Notice 637 or such lower percentage as the Authority may notify to a Reporting Bank

5.3 The Authority may impose additional bank-specific capital requirements, including extending the period of operation of the capital floors.

**PART VI: DEFINITION OF CAPITAL****Division 1: Eligible Tier 1 Capital**Tier 1 Capital

6.1 Tier 1 Capital shall be the sum of the following items, whether at the Solo or Group level, as the case may be:

- (a) paid-up ordinary share capital;
- (b) disclosed reserves, excluding (i) any revaluation reserves, (ii) unrealised fair value gains on revaluation of available-for-sale ("AFS") equity securities, (iii) unrealised fair value gains or losses on revaluation of AFS debt securities and AFS loans, (iv) cumulative fair value gains or losses on cashflow hedges of financial instruments that are measured at amortised cost, (v) unrealised fair value gains or losses on financial liabilities arising from changes in its own credit worthiness, and (vi) unrealised fair value gains or losses on non-trading financial liabilities unless the Reporting Bank can demonstrate that the application of the fair value option to these liabilities is part of an identifiable and effective hedging strategy<sup>4</sup>, after deducting any interim or final dividends that have been declared by the board of directors of the Reporting Bank or any banking group company on any class of shares and any interim losses incurred since the end of the last financial reporting period. Any interim profits earned since the end of the last financial reporting period may be included as disclosed reserves where the following conditions are met in the 12-month period immediately preceding the inclusion of the interim profits:
  - (i) every quarterly financial statement is prepared using the same accounting policies and practices applied in the preparation of the year-end financial statements, unless the change in the accounting policy or practice is in accordance with any statutory requirement;
  - (ii) every quarterly financial statement and every significant transaction is reviewed in a timely manner by an external auditor;
  - (iii) the external auditor of the Reporting Bank did not express a qualified opinion on any of the quarterly financial statements;
- (c) any paid-up non-cumulative preference shares where -
  - (i) the holder of the preference shares has a priority of claim, in respect of the principal of the preference shares in the event of a winding up of the Reporting Bank, which is lower than that of depositors, other creditors of the bank, and holders of Upper Tier 2 capital instruments, except where such persons rank equally with, or behind the holder of the preference shares;

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<sup>4</sup> An effective hedging strategy is one where the gains or losses on the revaluation of these liabilities are offset by corresponding losses or gains on the revaluation of the derivatives that have been clearly identified as hedging such liabilities.

- (ii) the preference shares are not covered under any arrangement that legally or economically enhances the priority of the claim of the holder of the preference shares as against the persons set out in sub-paragraph 6.1(c)(i) above;
- (iii) the preference shares, if redeemable (whether through a call option, share buy-back or otherwise), may be redeemed only at the option of the Reporting Bank with the prior approval of the Authority.<sup>5</sup> Without prejudice to any other matter that the Authority may consider relevant, the Authority shall, in determining whether to grant its approval, have regard to whether the Reporting Bank's capital is likely to remain adequate after redemption;
- (iv) the preference shares do not have any call option within the first five years from the issue date, other than a call option which may be exercised by the Reporting Bank where -
  - (A) the preference shares were issued for the purpose of a merger with, or acquisition by, the Reporting Bank and the merger or acquisition is aborted; or
  - (B) there is a change in tax status of the preference shares due to changes in the applicable tax laws of the country or territory in which the preference shares were issued;
- (v) the agreement governing the issuance of the preference shares does not contain any provision that mandates or creates an incentive for the Reporting Bank to repay the outstanding principal of the instrument early, other than a call option which may be exercised by the Reporting Bank -
  - (A) no earlier than 10 years after the issuance of the preference shares, accompanied by a provision whereby the dividend rate payable under the preference share increases by no more than 100 basis points over the initial rate, less the swap spread between the initial index basis and the stepped-up index basis if the Reporting Bank chooses not to exercise its option, such increase in dividend rate being the only one during the validity period of the preference shares; or
  - (B) in the two situations set out in sub-paragraph 6.1(c)(iv) above;
- (vi) any dividend paid under the preference shares is only paid to the extent that the Reporting Bank has profits distributable under written law, determined as at the last public disclosure of its financial statements; and
- (vii) the Authority has given its approval for the preference shares to be included as Tier 1 Capital;

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<sup>5</sup> The Authority will not normally consent to a Reporting Bank redeeming preference shares within the first 5 years of the issue date.

- (d) any innovative Tier 1 capital instrument which, in the opinion of the Authority, complies with the requirements set out in paragraphs 6.2 to 6.5 below;
- (e) any minority interest arising from accounting consolidation of subsidiaries<sup>6</sup>; and
- (f) any other instrument issued by a banking group company, which in the opinion of the Authority, is equivalent to a non-cumulative preference share or innovative Tier 1 capital instrument issued by the Reporting Bank.

#### Requirements Relating to a Reporting Bank Issuing Innovative Tier 1 Capital Instruments

6.2 A Reporting Bank intending to issue any innovative Tier 1 capital instrument ("IT1") for the purpose of inclusion as Tier 1 Capital under sub-paragraph 6.1(d), shall:

- (a) consult the Authority well in advance if the instrument has additional features that are not explicitly addressed in paragraphs 6.4 and 6.5; and
- (b) obtain the approval of the Authority for the instrument to qualify as Tier 1 Capital.

6.3 In applying for such approval, a Reporting Bank shall -

- (a) submit an appropriate memorandum of compliance stating how the proposed issuance complies with the requirements set out in paragraph 6.4 and, where applicable, paragraph 6.5, and identifying the relevant portions of the agreement governing the issuance of the instrument which address the requirements; and
- (b) confirm to the Authority in writing that it has received written external legal and accounting opinions stating that the requirements in paragraph 6.4 and, where applicable, paragraph 6.5 have been met.

#### Minimum Requirements for IT1 Issued Directly by a Reporting Bank

6.4 To qualify for inclusion as Tier 1 Capital, an IT1 shall satisfy the following requirements:

- (a) the IT1 is issued and fully paid-up in cash. Only the net proceeds received from the issuance of IT1 shall be included as capital;
- (b) the IT1 does not have a maturity date;
- (c) the IT1, if redeemable (whether through a call option, share buy-back or otherwise), may only be redeemed at the option of the Reporting Bank with the prior approval of the Authority<sup>7</sup>. Without prejudice to any other matter

<sup>6</sup> This does not include minority interests in preference shares that do not qualify as Tier 1 Capital.

<sup>7</sup> The Authority will not normally consent to a Reporting Bank redeeming the IT1 within the first 5 years of the issue date.

that the Authority may consider relevant, the Authority shall, in determining whether to grant its approval, have regard to whether the Reporting Bank's capital is likely to remain adequate after redemption;

- (d) the agreement governing the issuance of the IT1 does not have any call option within the first five years from the issue date, other than a call option which may be exercised by the Reporting Bank where -
  - (i) the IT1 was issued for the purpose of a merger with or acquisition by, the Reporting Bank and the merger or acquisition is aborted; or
  - (ii) there is a change in tax status of the IT1 due to changes in the applicable tax laws of the country or territory in which the IT1 was issued.
- (e) the agreement governing the issuance of the IT1 does not contain any provision that mandates or creates an incentive for the Reporting Bank to repay the outstanding principal of the instrument early<sup>8</sup>, other than a call option which may be exercised by the Reporting Bank -
  - (i) no earlier than 10 years after the issuance of the IT1, accompanied by a provision whereby the dividend or coupon rate payable under the IT1 increases by no more than 100 basis points over the initial rate, less the swap spread between the initial index basis and the stepped-up index basis if the Reporting Bank chooses not to exercise its option, such increase in dividend or coupon rate being the only one during the validity period of the IT1; or
  - (ii) in the two situations set out in sub-paragraph 6.4(d) above;
- (f) any dividend or coupon to be paid under the IT1 is only paid to the extent that the Reporting Bank has profits distributable under written law, determined as at the last public disclosure of its financial statements;
- (g) the Reporting Bank has full discretion over the amount and timing of dividends or coupons under the IT1 where the Reporting Bank -
  - (i) has not paid or declared a dividend on its ordinary shares in the preceding financial year; or
  - (ii) determines that no dividend is to be paid on such shares in the current financial year.
- (h) the dividends or coupons on the IT1 are non-cumulative;
- (i) the agreement governing the issuance of the IT1 does not contain any provision that mandates the Reporting Bank to make any dividend or coupon payments in equity, i.e. no mandatory stock settlement features;
- (j) the dividend or coupon rate, or the formulae for calculating dividend or coupon payments, is fixed at the time of issuance of the IT1 and is not

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<sup>8</sup> Examples are a cross-default or negative pledge clause or a restrictive covenant for an IT1 issued as debt.



linked to the credit standing of the Reporting Bank;

- (k) the IT1 is available to absorb the losses of the Reporting Bank without it being obliged to cease carrying on business. In this regard, for an IT1 classified legally as debt, this condition may be achieved if the agreement governing the issuance of the IT1 specifically provides for the principal and coupon payments to absorb losses where the Reporting Bank would otherwise be insolvent, or for the holders of the IT1 to be treated as if they were holders of a specified class of share capital in any proceedings commenced for the winding up of the Reporting Bank;
- (l) the holder of the IT1 has a priority of claim in respect of the principal and coupon payments of the IT1, in the event of a winding up of the Reporting Bank, which is lower than that of depositors, other creditors of the bank, and holders of Upper Tier 2 capital instruments, except where such persons rank equally with, or behind the holder of the IT1;
- (m) the IT1 is not secured or covered under any arrangement that legally or economically enhances the priority of the claim of any holder of the IT1 as against the persons set out in sub-paragraph 6.4(l) above;
- (n) for any IT1 issued as debt by the Reporting Bank, the holder of the IT1 waives his right to set off any amounts he owes the Reporting Bank against any subordinated amount owed to him due to the IT1 and commits to return any set-off amounts to the liquidator;
- (o) the subordination provisions of the IT1 are governed by the laws of Singapore. Where the IT1 is to be subject to the laws of a jurisdiction other than Singapore, the Reporting Bank shall satisfy itself and the Authority that all the relevant conditions specified in paragraph 6.4 and, where applicable, paragraph 6.5 are met under the laws of that jurisdiction;
- (p) the main features of the IT1, in particular subparagraphs 6.4(f) to (n) above, are disclosed accurately and in a manner that is easily understood by an investor; and
- (q) the agreement governing the issuance of the IT1 cannot be changed without prior approval of the Authority as the proposed changes may impact its eligibility as Tier 1 Capital.

#### Additional Requirements for IT1 Issued via a Special Purpose Vehicle ("SPV")

6.5 A Reporting Bank may include any preference share issued by an SPV which satisfies the requirements in paragraph 6.4 as Tier 1 Capital of the Reporting Bank at the Solo level if the following additional requirements are met:

- (a) the SPV is wholly-owned and managed by the Reporting Bank and under the sole control of the bank;
- (b) the SPV is established for the sole purpose of issuing the preference shares, the entire proceeds of which are lent to the Reporting Bank, without restrictions via an inter-company instrument (hereinafter referred to as "Interco");

- (c) the SPV does not carry on any other business or activity except those mentioned in sub-paragraph 6.5(b) above and appropriate arrangements are in place to prevent the SPV from becoming insolvent;
- (d) where dividends from the preference shares are waived by the SPV, the proceeds arising from coupons under the Interco that would otherwise accumulate in the SPV shall be made available, without restrictions, to the Reporting Bank;
- (e) the agreement governing the issuance of the Interco offers a level of loss absorbency that is identical to any Upper Tier 2 capital instrument issued by the Reporting Bank, except that the Interco shall be dated with a minimum 50-year maturity. At the maturity of the Interco, the SPV shall invest the proceeds from the Reporting Bank in a similar inter-company instrument if the proceeds are not otherwise applied to pay the holders of the preference shares;
- (f) the Interco is available to absorb the Reporting Bank's losses without the Reporting bank being obliged to cease carrying on business. In this regard, it may be achieved if the agreement governing the issuance of the Interco specifically provides that the principal and coupon payments under the Interco are available to absorb losses where the Reporting Bank would otherwise become insolvent, or for the SPV to be treated as if it was the holder of a specified class of share capital in any proceedings commenced for the winding up of the Reporting Bank;
- (g) the SPV's priority of claim in respect of the principal and coupon payments of the Interco in the event of winding up of the Reporting Bank, which is lower than that of depositors and other creditors of the bank except where such persons expressed to rank equally with, or behind the SPV;
- (h) the subordination provisions of the Interco are governed by the laws of Singapore. Where the Interco is governed by the laws of a jurisdiction other than Singapore, the Reporting Bank shall satisfy itself and the Authority that all the relevant conditions specified in paragraph 6.4 and, where applicable, paragraph 6.5 are met under the laws of that jurisdiction;
- (i) the agreement governing the issuance of the Interco does not contain any provision that would require early repayment of the Interco (e.g. a cross-default or negative pledge clause and any restrictive covenant);
- (j) a mandatory exchange of the preference shares issued by the SPV for shares qualifying as a Tier 1 Capital instrument issued by the Reporting Bank shall take place well before a serious deterioration in the financial position of the Reporting Bank. At the minimum, this mandatory exchange shall be triggered and shall take effect immediately<sup>9</sup> upon the occurrence of

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<sup>9</sup> The Authority considers it unacceptable for substitution to be contingent on any event, and for the issuance of shares by the Reporting Bank qualifying as Tier 1 Capital to be subject to any delays, such as receipt of approval from investors.

any of the following events<sup>10</sup>:

- (i) the Reporting Bank breaches the published minimum Tier 1 CAR or Total CAR requirements imposed by the Authority;
- (ii) the Authority exercises its powers under section 49(2)(c) of the Banking Act, or any successor provision, to assume control of and carry on the business of the Reporting Bank or direct some other person to assume control of and carry on the business of the bank;
- (iii) the Authority exercises its powers under section 49(2) of the Banking Act, or any successor provisions to direct the Reporting Bank to effect an exchange;
- (iv) any proceedings are commenced for the winding up of the Reporting Bank, whether in Singapore or elsewhere;
- (v) the SPV ceases to be wholly owned, managed and under the sole control of the Reporting Bank. For the purposes of this requirement, an SPV is considered to be wholly owned, managed and under the sole control of a Reporting Bank when:
  - (A) The Reporting Bank owns and controls the voting power attached to all the ordinary shares of the SPV;
  - (B) All the executive officers of the SPV are either employees of the Reporting Bank or appointees of the Reporting Bank. Where an appointee is a non-employee, the appointee shall be appointed pursuant to a management contract which requires the appointee to act in accordance with any instruction of the Reporting Bank;
  - (C) The majority of the Board of Directors of the SPV are employees of the Reporting Bank or are appointees of the Reporting Bank. In the case where appointees are non-employees, these persons are appointed pursuant to a management contract which requires them to act in accordance with any instruction of the Reporting Bank; and
  - (D) No person other than the Reporting Bank has the capacity to determine the outcome of decisions on the financial and operating policies of the SPV.

The rate of exchange in terms of the ratio of shares of the Reporting Bank to preference shares issued by the SPV shall be fixed at the time of issuance of the preference shares of the SPV. The Reporting Bank shall maintain a sufficient margin of authorised share capital that is not issued to enable exchange to take place at any time;

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<sup>10</sup> All instruments issued via an SPV approved by the Authority on or before 31 December 2004 or any such proposed instruments for which an application for approval from the Authority has been made on or before 31 December 2004 need not comply with requirements set out in paragraph 6.5 (j) where they have met the requirements set out in paragraph 1.4 (j) of Annex 1 of MAS Notice 637 on or before 31 December 2004.

- (k) the agreement governing the issuance of the Interco and the preference shares issued by the SPV cannot be changed without the prior approval of the Authority as the proposed changes may impact the instrument's eligibility as Tier 1 Capital.

**Note: The requirements for IT1 are migrated from Annex 1 of MAS Notice 637.**

#### Deductions from Tier 1 Capital

6.6 "Deductions from Tier 1 Capital" shall be the sum of the following items, whether at the Solo or Group level, as the case may be:

- (a) goodwill;
- (b) any intangible asset, including but not limited to copyright, patents and other intellectual property;
- (c) any deferred tax asset, except for any deferred tax assets associated with general provisions qualifying as Upper Tier 2 Capital as set out in paragraph 6.13(a). At the Solo level, deferred tax assets may be netted against deferred tax liabilities prior to being included as a Deduction from Tier 1 Capital. At the Group level, the following shall not be permitted for the purposes of calculating CAR:
  - (i) intra-entity netting of deferred tax assets against deferred tax liabilities for any company incorporated outside Singapore;
  - (ii) inter-entity netting of deferred tax assets against deferred tax liabilities.

However, the Authority may permit (i) and (ii) above if the Reporting Bank confirms in writing to the Authority that it has received written opinions from external auditors and legal advisors that the relevant tax authorities allow or would allow, deferred tax assets to be offset against deferred tax liabilities in a liquidation or winding up of the banking group companies incorporated outside Singapore;

- (d) 50% of capital investments in every subsidiary carrying on insurance business as an insurer ("insurance subsidiary") at the Solo level. For purposes of determining Tier 1 CAR at the Group level, the assets and liabilities of an insurance subsidiary shall be de-consolidated from the assets and liabilities of the banking group, with goodwill being deducted from Tier 1 Capital and the balance of the capital investment being deducted in the manner as specified in this sub-paragraph and in sub-paragraph 6.18(a);
- (e) 50% of capital investments in every subsidiary which is approved, licensed, registered or otherwise regulated by the Authority and whose assets and liabilities are not included in the consolidated financial statements of the banking group ("unconsolidated"), unless a deduction has been made pursuant to sub-paragraph 6.6(d) above;

- (f) 50% of capital investments in every unconsolidated subsidiary which is not approved, licensed, registered or otherwise regulated by the Authority, unless a deduction has been made pursuant to sub-paragraph 6.6(d) above;
- (g) 50% of capital investments in every major stake company which is not approved, licensed, registered or otherwise regulated by the Authority where –
  - (i) the Authority has not approved the holding of a major stake in the company under section 32 of the Banking Act; or
  - (ii) the company is acquired or held in the course of the satisfaction of debts due to the Reporting Bank or any of its banking group companies to be disposed off at the earliest suitable opportunity,unless a deduction has been made pursuant to sub-paragraph 6.6(f) above;
- (h) 50% of capital investments in every major stake company in excess of 20% of each tranche of such capital investments, where the holding of a major stake in the company is –
  - (i) approved by the Authority under section 32 of the Banking Act; or
  - (ii) excluded from operation of section 32 of the Banking Act pursuant to section 32(5)(a),unless a deduction has been made pursuant to sub-paragraphs 6.6(d) to (f) above;
- (i) 50% of capital investments in any financial institution incorporated in Singapore which is approved, licensed, registered or otherwise regulated by the Authority, in excess of 2% of Eligible Total Capital of the Reporting Bank at the Solo or Group<sup>11</sup> level, unless a deduction has been made pursuant to sub-paragraphs 6.6(d), (e) or (h) above;
- (j) 50% of the full amount of capital deficits in regulated financial subsidiaries and 50% of the pro-rata share of capital deficits in regulated financial associates. In the event that a re-capitalisation plan is in place or an irrevocable commitment has been given by other shareholders to make up the capital deficit, the Authority may approve a corresponding reduction in the amount of deductions in respect of such capital deficits;
- (k) 50% of credit enhancement facilities for securitisation transactions<sup>12</sup>;

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<sup>11</sup> Exposures exempted from deduction that are recorded in the banking book to be risk weighted at 100%. Exposures exempted from deduction that are recorded in the trading book to attract market risk capital charges.

<sup>12</sup> Please refer to Division 6 of Part VII for determination of the credit enhancement amounts in respect of securitisation transactions.

- (l) in the case where the Reporting Bank has adopted the IRBA for calculating minimum capital requirements for some or all of its credit exposures, 50% of any excess of the EL calculated by the Reporting Bank over the TEP maintained by the Reporting Bank; and
- (m) any other item or class of items which the Authority may specify in writing to the Reporting Bank for the purpose of this paragraph.

**Note: The deductions at sub-paragraphs (d) to (l) are in accordance with paragraph 37 of Basel II which states that deductions from capital will be 50% from Tier 1 Capital and 50% from Upper Tier 2 Capital.**

6.7 Notwithstanding sub-paragraph 6.6(d) above, for purposes of determining Deductions from Tier 1 Capital, the capital investments held through the following funds by an insurance subsidiary shall be included as part of the capital investments of the banking group:

- (a) any insurance fund established and maintained for its general business or any equivalent fund;
- (b) any insurance fund established and maintained for its non-participating policies or any equivalent fund;
- (c) any insurance fund established and maintained for its participating policies, and which relates to assets held other than for the purpose of meeting the liabilities in respect of the policies of the insurance fund or any equivalent fund;
- (d) any insurance fund established and maintained for its investment-linked policies, and which relates to assets held other than for the purpose of meeting those liabilities in respect of the policies of the insurance fund, the values of which are dependent on the value of the underlying assets or any equivalent fund;
- (e) the shareholders' funds of any insurance subsidiary.

6.8 Notwithstanding sub-paragraphs 6.6(a) to (c) above, a Reporting Bank need not include as "Deductions from Tier 1 Capital", at the Solo level, the goodwill and intangible assets, including but not limited to copyright, patents and other intellectual property, arising from the consolidation of the assets and liabilities of any of its subsidiaries and any other company treated as part of the group of companies of that subsidiary according to Accounting Standards with the assets and liabilities of the banking group if the following conditions are met:

- (a) the Reporting Bank directly owns the ordinary shares of that subsidiary;
- (b) that subsidiary is not a financial institution approved, licensed, registered or otherwise regulated by a regulatory agency;

- (c) the consolidated net tangible assets ("NTA") of that subsidiary, less the effect of any capital investments by any banking group company in that subsidiary or any other company treated as part of the group of companies of that subsidiary according to Accounting Standards, is larger than the amount of the Reporting Bank's capital investments in that subsidiary;
- (d) where any banking group company, other than that subsidiary or any other company treated as part of the group of companies of that subsidiary according to Accounting Standards, has a capital investment in that subsidiary or any other company treated as part of the group of companies of that subsidiary according to Accounting Standards, the calculation under sub-paragraph 6.8(c) above shall be certified by the external auditor of the Reporting Bank;
- (e) the Reporting Bank shall calculate, if so required by the Authority, the amount of goodwill and intangible assets including but not limited to copyright, patents and other intellectual property, arising from consolidation of assets and liabilities of that subsidiary and any other company treated as part of the group of companies of that subsidiary according to Accounting Standards with the assets and liabilities of the banking group.

6.9 A Reporting Bank that is relying on the treatment set out in paragraph 6.8 shall indicate in its submission to the Authority of [Regulatory Returns on Capital Requirements] pursuant to [Part XIII, paragraph •] of this Notice that it is relying on the treatment set out in paragraph 6.8.

#### Limits on Eligible Tier 1 Capital

6.10 The amount of innovative Tier 1 capital instruments shall not exceed 15% of Eligible Tier 1 Capital of the Reporting Bank at the Solo or Group level, as the case may be. (Please see example at Annex 6A.)

6.11 The amount of non-cumulative preference shares and innovative Tier 1 capital instruments shall not exceed 30% of Eligible Tier 1 Capital of the Reporting Bank at the Solo or Group level, as the case may be. (Please see example at Annex 6A.)

6.12 Any excess over the 15% and 30% limits described in paragraphs 6.10 and 6.11 shall not qualify as Eligible Tier 1 Capital (calculated in the manner set out in paragraph 4.1) for the calculation of Tier 1 CAR but may qualify as Upper Tier 2 Capital.

### **Division 2: Eligible Total Capital**

#### Upper Tier 2 Capital

6.13 Upper Tier 2 Capital shall comprise the sum of the following items, whether at the Solo or Group level, as the case may be:

- (a) in the case where the Reporting Bank has adopted the SA(CR)<sup>13</sup>, general provisions (also referred to as collective impairment provisions), made for impairment losses that have yet to be identified or that have not been allocated specifically to any asset or class of assets, provided the following conditions are satisfied:
- (i) deferred tax assets associated with these general provisions ("associated deferred tax assets") shall be deducted from the notional amount of these general provisions; and
  - (ii) the amount of general provisions, after deducting associated deferred tax assets, shall not exceed 1.25% of the sum of credit RWA, market RWA and operational RWA;
- (b) in the case where the Reporting Bank has adopted the IRBA<sup>13</sup>, any excess of the TEP maintained by the Reporting Bank over the EL calculated by the Reporting Bank, provided that the amount of TEP recognised as Upper Tier 2 Capital shall not exceed 0.6% of credit RWA;
- (c) any cumulative preference shares or Upper Tier 2 capital instruments which, in the opinion of the Authority, complies with the requirements set out in paragraphs 6.14 to 6.16;
- (d) 45% of revaluation surpluses on land and building assets, where the following conditions pertaining to revaluations are satisfied:
- (i) the valuation of any land and building asset shall be obtained from a qualified valuer and the increase in value shall be recorded as a revaluation surplus in the financial statements;
  - (ii) a new valuation from a qualified property valuer shall be obtained -
    - (A) at least once every three years; or
    - (B) where the value of the land or building has been substantially impaired by any event,whichever occurs earlier;
  - (iii) impairment charges taken against any land and building asset may not be netted against revaluation surpluses from any other asset;
  - (iv) the external auditor of the Reporting Bank shall not have expressed a qualified opinion on the revaluation of any land and building asset;
- (e) 45% of revaluation gains on AFS equity securities that are listed on any securities exchange in Singapore and any recognised group A exchange as

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<sup>13</sup> In the case of a Reporting Bank that has adopted the SA(CR) for a portion of its credit exposures and the IRBA for its remaining credit exposures, the provisions maintained by the Reporting Bank shall be attributed to the SA(CR) and the IRBA on a pro-rata basis according to the proportion of the Reporting Bank's credit RWA that are subject to the SA(CR) and the IRBA respectively. The treatment of the provisions attributed to the SA(CR) shall be in accordance with paragraph (a) while the treatment of the provisions attributed to the IRBA shall be in accordance with paragraph (b).



set out in Table 6 of the Fourth Schedule to the Securities and Futures (Margin and Financial Requirements for Holders of Capital Markets Services License) Regulations (G.N.S498/2002), but excluding any equity security required to be deducted under paragraph 6.18, where the following conditions pertaining to revaluations are satisfied:

- (i) each equity security shall be valued at least monthly and with greater frequency under volatile market conditions;
  - (ii) impairment charges taken against any equity security shall be taken as a charge to profit and loss account and shall not be netted against gains from any other asset; and
  - (iii) the external auditors of the Reporting Bank shall not have expressed a qualified opinion on the revaluation of any equity security;
- (f) any non-cumulative preference shares and innovative Tier 1 capital instruments in excess of the 15% and 30% limits described in paragraphs 6.10 and 6.11; and
- (g) any other instrument issued by a banking group company, which in the opinion of the Authority, is equivalent to a cumulative preference share or Upper Tier 2 capital instrument issued by the Reporting Bank.

#### Requirements Relating to the Reporting Bank Issuing Upper Tier 2 Capital Instruments

6.14 A Reporting Bank intending to issue any Upper Tier 2 capital instrument ("UT2") for the purpose of inclusion as Upper Tier 2 Capital under sub-paragraph 6.13(c) shall:

- (a) consult the Authority well in advance if the instrument has additional features that are not explicitly addressed in paragraph 6.16; and
- (b) obtain the approval of the Authority for the instrument to qualify as Upper Tier 2 Capital.

6.15 In applying for such approval, a Reporting Bank shall:

- (a) submit an appropriate memorandum of compliance stating how the proposed issuance complies with the requirements set out in paragraph 6.16 and identifying the relevant portions of the agreement governing the issuance of the instrument which address the requirements; and
- (b) confirm to the Authority in writing that it has received written external legal and accounting opinions stating that the requirements in paragraph 6.16 have been met.

#### Minimum Requirements for UT2

6.16 To qualify for inclusion as Upper Tier 2 capital, an UT2 shall satisfy the following requirements:

- (a) the UT2 is issued and fully paid-up in cash. Only the net proceeds received from the issuance of UT2 shall be included as capital;
- (b) the UT2 has a minimum original maturity of at least 10 years. Where the agreement governing the issuance of the UT2 provides for the loan to be drawn down in a series of tranches, the minimum original maturity of each tranche shall be 10 years;
- (c) the UT2, if redeemable (whether through a call option, share buyback or otherwise), may only be redeemed at the option of the Reporting Bank with the prior approval of the Authority<sup>14</sup>. Without prejudice to any other matter that the Authority may consider relevant, the Authority shall, in determining whether to grant its approval, have regard to whether the Reporting Bank's capital is likely to remain adequate after redemption;
- (d) the agreement governing the issuance of the UT2 does not have any call option within the first five years from the issue date, other than a call option which may be exercised by the Reporting Bank where -
  - (i) the UT2 was issued for the purpose of a merger with or acquisition by, the Reporting Bank and the merger or acquisition is aborted; or
  - (ii) there is a change in tax status of the UT2 due to changes in the applicable tax laws of the country or territory in which the UT2 was issued;
- (e) the agreement governing the issuance of the UT2 does not contain any provision that mandates or creates an incentive for the Reporting Bank to repay the outstanding principal of the instrument early<sup>15</sup>, other than a call option which may be exercised by the Reporting Bank -
  - (i) no earlier than 10 years after the issuance of the UT2, accompanied by a provision whereby the dividend or coupon rate payable under the UT2 increases by no more than 100 basis points over the initial rate, less the swap spread between the initial index basis and the stepped-up index basis if the Reporting Bank chooses not to exercise its option, such increase in dividend or coupon rate being the only one during the validity period of the UT2; or
  - (ii) in the two situations set out in sub-paragraph 6.16(d) above;
- (f) the agreement governing the issuance of the UT2 provides the Reporting Bank with an option to defer any dividend or coupon payment on the instrument, where the Reporting Bank -
  - (i) has not paid or declared a dividend on its ordinary and other classes of preference shares in the preceding financial year; or

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<sup>14</sup> The Authority will not normally consent to a Reporting Bank redeeming the UT2 within the first 5 years of the issue date.

<sup>15</sup> Examples are a cross-default or negative pledge clause or a restrictive covenant for an UT2 issued as debt.

- (ii) determines that no dividend is to be paid on such shares in the current financial year. Such deferred dividends or interest may bear interest, but the interest rate payable on deferred dividends or interest shall not exceed market rates;
- (g) the dividend or coupon rate, or the formulae for calculating dividend or coupon payments, is fixed at the time of issuance of the UT2 and is not linked to the credit standing of the Reporting Bank;
- (h) the UT2 is available to absorb the losses of the Reporting Bank without it being obliged to cease carrying on business. In this regard, for an UT2 classified legally as debt, this condition may be achieved if the agreement governing the issuance of the UT2 specifically provides for the principal and coupon payments to absorb losses where the Reporting Bank would otherwise be insolvent, or for the holders of the UT2 to be treated as if they were holders of a specified class of share capital in any proceedings commenced for the winding up of the Reporting Bank;
- (i) the holder of the UT2 has a priority of claim in respect of the principal and coupon payments of the UT2, in the event of a winding up of the Reporting Bank, which is lower than that of depositors and other creditors of the bank, except where such persons rank equally with, or behind holders of the UT2;
- (j) the UT2 is not secured or covered under any arrangement that legally or economically enhances the priority of the claim of any holder of the UT2 as against the persons set out in the sub-paragraph 6.16(i) above;
- (k) for any UT2 issued as debt by the Reporting Bank, the holder of the UT2 waives his right to set off any amounts he owes the Reporting Bank against any subordinated amount owed to him due to the UT2 and commits to return any set-off amounts to the liquidator;
- (l) the subordination provisions of the UT2 are governed by the laws of Singapore. Where the UT2 is to be subject to the laws of a jurisdiction other than Singapore, the Reporting Bank shall satisfy itself and the Authority that all the relevant conditions specified in paragraph 6.16 are met under the laws of that jurisdiction;
- (m) the main features of the UT2, in particular sub-paragraphs 6.16(f) to (k) above are disclosed accurately and in a manner that is easily understood by an investor;
- (n) the agreement governing the issuance of the UT2 cannot be changed without prior approval of the Authority as the proposed changes may impact its eligibility as Upper Tier 2 Capital subject to Limit;
- (o) any UT2 issued in the form of subordinated debt does not qualify in full for inclusion as Upper Tier 2 Capital subject to Limit in its final five years to maturity. The eligible amount is to be amortised on a straight-line basis by 20% per annum. Where the loans are repayable in separate tranches, each tranche is to be amortised individually, as if it were a separate loan. The amortisation schedule is as follows:

<u>Years to maturity</u>	<u>Amortised amount eligible to be included in Upper Tier 2 Capital subject to Limit</u>
Less than 5	80%
Less than 4	60%
Less than 3	40%
Less than 2	20%
Less than 1	0%

- (p) where a Reporting Bank issues subordinated debt in a foreign currency, the debt is to be revalued periodically (at least monthly) in terms of Singapore dollars at the prevailing exchange rates. Where the Reporting Bank intends to use a swap to hedge the foreign exchange exposure arising from the foreign currency debt, it shall first consult the Authority on the capital treatment applicable to the hedge.

**Note: The requirements for UT2 are migrated from Annex 2 of MAS Notice 637.**

#### Limit on Upper Tier 2 Capital

- 6.17 Upper Tier 2 Capital shall not exceed 100% of Eligible Tier 1 Capital.

#### Deductions from Upper Tier 2 Capital

- 6.18 Deductions from Upper Tier 2 Capital shall be the sum of the following items whether at the Solo or Group level, as the case may be:

- (a) 50% of capital investments in every insurance subsidiary at the Solo level. For purposes of determining Total CAR at the Group level, the assets and liabilities of an insurance subsidiary shall be de-consolidated from the assets and liabilities of the banking group, with goodwill being deducted from Tier 1 Capital and the balance of the capital investment being deducted in the manner as specified in this sub-paragraph and in sub-paragraph 6.6(d);
- (b) 50% of capital investments in every unconsolidated subsidiary which is approved, licensed, registered or otherwise regulated by the Authority, unless a deduction has been made pursuant to sub-paragraph 6.18(a) above;
- (c) 50% of capital investments in every unconsolidated subsidiary which is not approved, licensed, registered or otherwise regulated by the Authority, unless a deduction has been made pursuant to sub-paragraph 6.18(a) above;
- (d) 50% of capital investments in every major stake company which is not approved, licensed, registered or otherwise regulated by the Authority, where -
  - (i) the Authority has not approved the holding of a major stake in the company under section 32 of the Banking Act; or

- (ii) the company is acquired or held in the course of the satisfaction of debts due to the Reporting Bank or any of its banking group companies to be disposed off at the earliest suitable opportunity,  
unless a deduction has been made pursuant to sub-paragraph 6.18(c) above;
- (e) 50% of capital investments in every major stake company in excess of 20% of each tranche of such capital investments, where the holding of a major stake in the company is -
  - (i) approved by the Authority under section 32 of the Banking Act; or
  - (ii) excluded from operation of section 32 of the Banking Act pursuant to section 32(5)(a),  
unless a deduction has been made pursuant to sub-paragraphs 6.18(a) to (c) above.
- (f) 50% of capital investments in any financial institution incorporated in Singapore which is approved, licensed, registered or otherwise regulated by the Authority, in excess of 2% of Eligible Total Capital of the Reporting Bank at the Solo or Group<sup>16</sup> level, unless a deduction has been made pursuant to sub-paragraphs 6.18(a), (b) or (e) above;
- (g) 50% of the full amount of capital deficits in regulated financial subsidiaries and 50% of the pro-rata share of capital deficits in regulated financial associates. In the event that a re-capitalisation plan is in place or an irrevocable commitment has been given by other shareholders to make up the capital deficit, the Authority may approve a corresponding reduction in the amount of deductions in respect of such capital deficits;
- (h) 50% of credit enhancement facilities for securitisation transactions<sup>17</sup>;
- (i) in the case where the Reporting Bank has adopted the IRBA for calculating minimum capital requirements for some or all of its credit exposures, 50% of any excess of the EL calculated by the Reporting Bank over the TEP maintained by the Reporting Bank; and
- (j) any other item or class of items which the Authority may specify in writing to the Reporting Bank for the purpose of this paragraph.

**Note: The deductions at sub-paragraphs (a) to (i) are in accordance with paragraph 37 of Basel II, which states that deductions from capital will be 50% from Tier 1 Capital and 50% from Upper Tier 2 Capital.**

<sup>16</sup> Exposures exempted from deduction that are recorded in the banking book to be risk weighted at 100%. Exposures exempted from deduction that are recorded in the trading book to attract market risk capital charges.

<sup>17</sup> Please refer to Division 6 of Part VII for determination of the credit enhancement amounts in respect of securitization transactions.

6.19 Notwithstanding sub-paragraph 6.18(a) above, for purposes of determining Deductions from Upper Tier 2 Capital, the capital investments held through the following funds by an insurance subsidiary shall be included as part of the capital investments of the banking group:

- (a) any insurance fund established and maintained for its general business or any equivalent fund;
- (b) any insurance fund established and maintained for its non-participating policies or any equivalent fund;
- (c) any insurance fund established and maintained for its participating policies, and which relates to assets held other than for the purpose of meeting the liabilities in respect of the policies of the insurance fund or any equivalent fund;
- (d) any insurance fund established and maintained for its investment-linked policies, and which relates to assets held other than for the purpose of meeting those liabilities in respect of the policies of the insurance fund, the values of which are dependent on the value of the underlying assets or any equivalent fund;
- (e) the shareholders' funds of any insurance subsidiary.

**Annex 6A****CALCULATION OF THE 15% AND 30% LIMITS ON ELIGIBLE TIER 1 CAPITAL  
AND THE LIMIT ON UPPER TIER 2 CAPITAL**

This Annex explains by way of an example, the calculation of the 15% and 30% limits on Eligible Tier 1 Capital as well as the limit on Upper Tier 2 Capital as described in paragraphs 6.10 to 6.12 and 6.17 of the Notice, respectively.

Example of a balance sheet of a Reporting Bank:

Paid-up ordinary share capital	\$55
Disclosed reserves	\$25
Non-cumulative perpetual preference share capital ("Preference Shares")	\$14
Innovative Tier 1 Capital approved by the Authority ("IT1")	\$16
Minority Interest ("MI")	\$5
Goodwill	\$10
Intangible assets	\$5

**Application of the 30% Limit****Example 1:**

Step 1: Calculate the net amount of Eligible Tier 1 Capital according to the following formula:

<i>Paid-up ordinary share capital (\$55)</i> + <i>Disclosed reserves (\$25)</i> + <i>MI(\$5)</i> <i>less</i> <i>Goodwill (\$10)</i> <i>less</i> <i>Intangible assets (\$5)</i>
<b><i>Net amount of Eligible Tier 1 Capital = \$70</i></b>

Step 2: Calculate the maximum amount of IT1 and Preference Shares that can be included as Eligible Tier 1 Capital ("Allowable IT1 and Preference Shares") as follows:

$\frac{\text{Net amount of Eligible Tier 1 Capital (S\$70) * 30\%}{70\%}$
<b>Allowable IT1 and Preference Shares = \$30</b>



**Application of the 15% Limit**Example 2:

Step 1: Determine the 30% limit for Allowable IT1 and Preference Shares. (See example 1)

Step 2: (A) Where Preference Shares (e.g. \$16) is more than half of Allowable IT1 and Preference Shares

Calculate the amount of IT1 that can be included as Eligible Tier 1 Capital ("Allowable IT1") as follows:

<p><i>Allowable IT1 and Preference Shares (\$30)</i> less <i>Preference Shares (\$16)</i></p>
<p><b><i>Allowable IT1 = \$14</i></b> and <b><i>Excess of \$2 can be included in Upper Tier 2 Capital for Total CAR</i></b></p>

(B) Where Preference Shares is Less than half of Allowable IT1 and Preference Shares

Calculate the amount of Non-innovative Tier 1 Capital that can be included as Eligible Tier 1 capital is as follows:

<p><i>Paid-up ordinary share capital (\$55)</i> + <i>Disclosed reserves (\$25)</i> + <i>Preference Shares (\$14)</i> + <i>MI (\$5)</i> Less <i>Goodwill (\$10)</i> Less <i>Intangible assets (\$5)</i></p>
<p><b><i>Net amount of non-innovative Tier 1 Capital = \$84</i></b></p>

Step 3: Calculate Allowable IT1 as follows:

$\frac{\text{Net amount of IT1 (S\$84)} * 15\%}{85\%}$
<b><i>Allowable IT1 = \$14.82</i></b>

**Application of the 100% Limit on Upper Tier 2 Capital**Example 3:

Step 1: Calculate net amount of Eligible Tier 1 Capital (including IT1) (following from Example 2B) as follows:

<i>Paid-up ordinary share capital (\$55)</i> + <i>Disclosed reserves (\$25)</i> + <i>Preference Shares (\$14)</i> + <i>IT1 (\$]4.82)</i> + <i>MI(\$5)</i> less <i>Goodwill (\$10)</i> less <i>Intangible assets (\$5)</i>
<b><i>Net amount of Eligible Tier 1 Capital = \$98.82</i></b>

Step 2: Calculate amount that is allowable as Upper Tier 2 Capital as follows:

<b><i>Net amount of Eligible Tier 1 Capital (\$98.82)* 100%</i></b>
<b><i>Allowable Upper Tier 2 Capital = \$98.82<sup>18</sup></i></b>

<sup>18</sup> In this example, there is hence \$1.18 of IT1 that is not admissible as Eligible Tier 1 Capital but it can be included as Upper Tier 2 Capital for the purposes of Total CAR.

**PART IX: OPERATIONAL RISK****Division 1: Introduction**Sound Practices of Operational Risk Management

9.1 A Reporting Bank is expected to adopt the practices set out in the report "Sound Practices for the Management and Supervision of Operational Risk" issued by the BCBS in February 2003.

9.2 A Reporting Bank is expected to adopt an approach for calculating its operational RWA that is commensurate with the complexity and sophistication of its businesses and operations. A Reporting Bank with significant operational risk exposures is expected to use an approach other than the Basic Indicator Approach. A Reporting Bank is also encouraged to adopt a more advanced approach as it develops more sophisticated operational risk measurement systems and practices.

Approaches for Calculating Operational RWA

9.3 Subject to paragraphs 9.4 and 9.5, a Reporting Bank shall calculate its operational RWA using any one of the following 3 approaches.

- (a) Basic Indicator Approach ("BIA");
- (b) Standardised Approach ("SA(OR)") or Alternative Standardised Approach ("ASA"); and
- (c) Advanced Measurement Approaches ("AMA").

The 3 approaches have been listed above in a continuum of increasing sophistication and risk sensitivity.

9.4 A Reporting Bank intending to calculate its Operational RWA using a combination of the 3 approaches set out in paragraph 9.3 shall seek the prior approval of the Authority.

9.5 A Reporting Bank that has adopted SA(OR), ASA or an AMA shall not subsequently use a simpler approach without the approval of the Authority. If the Authority is not satisfied that a Reporting Bank that has adopted SA(OR), ASA or an AMA meets the requirements specified in this Notice for that approach, the Authority may require the Reporting Bank to use a simpler approach for some or all of its operations and may specify such conditions as it deems fit that the Reporting Bank shall satisfy before it may return to using the more advanced approach. The Reporting Bank shall not return to using the more advanced approach without the Authority's approval.

## Division 2: Basic Indicator Approach

9.6 A Reporting Bank using BIA shall calculate its operational RWA by multiplying its operational risk capital charge under BIA by 12.5. The operational risk capital charge is equal to the average over the preceding three years of a fixed percentage [denoted ( $\alpha$ )] of annual gross income of the Reporting Bank, where such income is positive. The formula for calculating the operational RWA under BIA is:

$$\text{Operational RWA} = \{ [\sum(\text{GI}_{1\dots n} \times \alpha)] / n \} \times 12.5$$

Where:

GI = annual gross income of the Reporting Bank, where positive, over the preceding three years<sup>19</sup> as set out in paragraph 9.8

n = number of the preceding three years for which annual gross income is positive<sup>19</sup>

$\alpha$  = 15%

9.7 A Reporting Bank shall calculate its gross income ("GI") as the sum of its:-

(a) net interest income<sup>20</sup>, and

(b) net non-interest income<sup>20</sup>,

gross of:

(i) any provisions (e.g. for unpaid interest); and

(ii) any operating expenses, including any fees paid for outsourced services<sup>21</sup>,

but does not include:

(A) any realised profits/losses from the sale of financial assets in the banking book;<sup>22</sup>

<sup>19</sup> If the annual gross income for any given year is negative or zero, the figure shall not be included for the purposes of calculating operational RWA.

<sup>20</sup> Net interest income is defined as interest income less interest expense. Net non-interest income is defined as other operating income less other operating expenses.

<sup>21</sup> In contrast to fees paid for outsourced services, fees received by any Reporting Bank that provides outsourcing services shall be included in the definition of gross income.

<sup>22</sup> Realised profits/losses from such financial assets classified as "held to maturity" or "available for sale" (in accordance with Singapore Financial Reporting Standard 39) which typically constitute items of the banking book, shall be excluded from the definition of gross income.

- (B) any income or expense item not derived from the ordinary activities of the Reporting Bank<sup>23</sup>; and
- (C) any income derived from any insurance recoveries.

9.8 A Reporting Bank shall calculate its annual gross income for the most recent year by aggregating the gross income of the last four financial quarters. A Reporting Bank shall calculate its annual gross income for the two years preceding the most recent year in the same manner.

Example: For a Reporting Bank calculating its operational RWA as at end November 2008, the annual gross income for the previous three years shall be calculated as follows:-

	<b>Year 3</b>	<b>Year 2</b>	<b>Year 1</b>
Gross Income for financial quarter ending	Sep'08 (GI <sub>3a</sub> )	Sep'07 (GI <sub>2a</sub> )	Sep'06 (GI <sub>1a</sub> )
	Jun'08 (GI <sub>3b</sub> )	Jun'07 (GI <sub>2b</sub> )	Jun'06 (GI <sub>1b</sub> )
	Mar'08 (GI <sub>3c</sub> )	Mar'07 (GI <sub>2c</sub> )	Mar'06 (GI <sub>1c</sub> )
	Dec'07 (GI <sub>3d</sub> )	Dec'06 (GI <sub>2d</sub> )	Dec'05 (GI <sub>1d</sub> )
Total	GI <sub>3</sub> = GI <sub>3a</sub> + GI <sub>3b</sub> + GI <sub>3c</sub> + GI <sub>3d</sub>	GI <sub>2</sub> = GI <sub>2a</sub> + GI <sub>2b</sub> + GI <sub>2c</sub> + GI <sub>2d</sub>	GI <sub>1</sub> = GI <sub>1a</sub> + GI <sub>1b</sub> + GI <sub>1c</sub> + GI <sub>1d</sub>

**Question: We welcome comments on the proposed method for calculating annual gross income.**

<sup>23</sup> This includes income or expenses derived from events or transactions that are clearly distinct from the ordinary activities of the Reporting Bank and therefore are not expected to recur frequently or regularly. Though not intended to be an exhaustive list, such items would include income or expenses arising from (i) the sale of fixed assets, (ii) expropriation of assets, or (iii) earthquakes or other natural disasters.

### Division 3: Standardised Approach

9.9 A Reporting Bank using SA(OR) shall calculate its operational RWA by multiplying its operational risk capital charge under SA(OR) by 12.5. The operational risk capital charge for the Reporting Bank is equal to the three-year average of the simple summation of the operational risk capital charges across the eight business lines set out in paragraph 9.10 in each year. The operational risk capital charge for each business line in each year is calculated by multiplying the annual gross income (as provided under paragraphs 9.7 and 9.8) for that business line in that year by the factor (denoted  $\beta$ ) applicable to that business line. In any given year, negative operational risk capital charges (resulting from negative gross income) in any business line may offset positive operational risk capital charges in other business lines. Where the aggregate operational risk capital charge across the eight business lines in a given year is negative, then the operational risk capital charge for the Reporting Bank for that year is deemed to be zero. The formula for calculating the operational RWA under SA(OR) is:

$$\text{Operational RWA} = \{ \{ \sum_{\text{years 1-3}} \max[\sum (\text{GI}_{1-8} \times \beta_{1-8}), 0] \} / 3 \} \times 12.5$$

Where:

$\text{GI}_{1-8}$  = the annual gross income in a given year for each of the eight business lines set out in paragraph 9.10

$\beta_{1-8}$  = a fixed beta factor as detailed in Table 1

Table 1

Business Lines	Beta Factors
Corporate Finance ( $\beta_1$ )	18%
Trading and Sales ( $\beta_2$ )	18%
Payment and Settlement ( $\beta_3$ )	18%
Agency Services ( $\beta_4$ )	15%
Asset Management ( $\beta_5$ )	12%
Retail Brokerage ( $\beta_6$ )	12%
Retail Banking ( $\beta_7$ )	12%
Commercial Banking ( $\beta_8$ )	15%

**Question: We welcome comments on the proposal to allow negative operational risk capital charges (resulting from negative gross income) in any business line to offset positive operational risk capital charges in other business lines.**

9.10 A Reporting Bank using SA(OR) shall classify its business activities into the following eight business lines: corporate finance, trading and sales, payment and settlement, agency services, asset management, retail brokerage, retail banking and commercial banking. The business lines are defined in detail in Annex 9A.

9.11 A Reporting Bank shall develop specific policies and have documented criteria for mapping its current business activities to the appropriate business lines in accordance with paragraph 9.12 and Annex 9A. The Reporting Bank shall review and adjust these policies and criteria for new or changing business activities as appropriate.

9.12 A Reporting Bank shall adopt the following principles for mapping its business activities to the appropriate business lines:

- (a) subject to sub-paragraph 9.12(b), each activity or product shall be mapped into not more than one of the eight business lines set out in paragraph 9.10. A Reporting Bank shall have processes in place to define the mapping of any new activities or products;
- (b) any activity that cannot be readily mapped into any business line in paragraph 9.10 and which is ancillary to and supports a business line in paragraph 9.10 ("ancillary activity") shall be allocated to the business line it supports. If the activity supports more than one business line, an objective criterion shall be used to allocate the annual gross income derived from that activity to the relevant business lines;
- (c) any activity that cannot be mapped into a particular business line in paragraph 9.10 and is not an ancillary activity to a business line in paragraph 9.10 shall be mapped into one of the business lines with the highest associated beta factor (i.e. 18%). Any ancillary activity to that activity will follow the same business line treatment;
- (d) once an activity has been mapped into a particular business line, the activity and any ancillary activity shall be mapped into the same business line consistently over time;
- (e) a Reporting Bank may use an internal pricing method to allocate gross income between business lines provided that the total gross income for the Reporting Bank (as would be recorded under BIA) equals the sum of gross income for the eight business lines;
- (f) the mapping of activities into business lines for the purposes of calculating operational RWA shall be consistent with the definitions of business lines used for the calculations of market RWA and credit RWA. A Reporting Bank shall not deviate from this principle, if it has any reason to believe that such a deviation is inappropriate. Any deviation from this principle and the reason(s) for such deviation shall be clearly documented;
- (g) the mapping process shall be subject to regular independent reviews by internal or external auditors.



**Question: We welcome comments on the proposed principles for mapping business activities to business lines, which are adapted from Basel II.**

- 9.13 A Reporting Bank shall not use SA(OR) to calculate its operational RWA unless:
- (a) the board of directors and senior management of the Reporting Bank, as appropriate, are actively involved in the oversight of the operational risk management framework;
  - (b) the Reporting Bank has an operational risk management system with clear responsibilities assigned to an operational risk management function. The operational risk management function is responsible for developing strategies to identify, assess, monitor and control/mitigate operational risk; for codifying bank-level policies and procedures concerning operational risk management and controls; and for the design and implementation of the operational risk assessment methodology and operational risk-reporting system of the Reporting Bank;
  - (c) as part of its internal operational risk assessment system, the Reporting Bank systematically tracks relevant operational risk data including material losses by business line. The operational risk assessment system of the Reporting Bank shall be closely integrated into its risk management processes. Its output shall be an integral part of the process of monitoring and controlling the operational risk profile of the Reporting Bank;
  - (d) the Reporting Bank has a well-documented set of internal policies, controls and procedures concerning its operational risk management system, including policies for the treatment of non-compliance issues. It shall also have a routine in place for ensuring compliance with such policies, controls and procedures;
  - (e) there is regular reporting of operational risk exposures, including material operational losses, to business unit management, senior management and to the board of directors. The Reporting Bank shall have written procedures (forming part of the set of documents described in sub-paragraph 9.13(d)) for taking appropriate action according to the information within the management reports; and
  - (f) the operational risk management processes and assessment system of the Reporting Bank, including the activities of the business units and of the operational risk management function, are subject to validation and regular independent reviews by internal or external auditors.

**Question: We welcome comments on the proposed minimum requirements for adopting SA(OR), which are adapted from Basel II.**

#### Division 4: Alternative Standardised Approach

9.14 Subject to the approval of the Authority, a Reporting Bank may use ASA to calculate its operational RWA. A Reporting Bank shall not use ASA to calculate its operational RWA unless it meets all requirements listed in paragraph 9.13 and satisfies the Authority that using ASA provides an improved basis over SA(OR) for assessing its operational risk exposure (for example, in avoiding double counting of risks).

9.15 A Reporting Bank that has adopted ASA shall not subsequently use SA(OR) without the approval of the Authority.

9.16 Under ASA, a Reporting Bank shall calculate the operational risk capital charge of each business line in the same way as under SA(OR) as set out in paragraph 9.12, except for the retail banking and commercial banking business lines. For these two business lines, the Reporting Bank shall calculate the operational risk capital charge by multiplying the amounts of loans and advances by a fixed factor 'm'. The formula for calculating the operational RWA under ASA is:

$$\text{Operational RWA} = \left\{ \left\{ \sum_{\text{years } 1-3} \max[\Sigma (\text{GI}_{1-6} \times \beta_{1-6}), 0] \right\} / 3 + (\beta_r \times m \times \text{LA}_r) + (\beta_c \times m \times \text{LA}_c) \right\} \times 12.5$$

Where:

- $\beta_r$  = the beta for the retail banking ( $\beta_7$ ) business line (where  $\beta_7 = 12\%$ )
- $\beta_c$  = the beta for the commercial banking ( $\beta_8$ ) business line (where  $\beta_8 = 15\%$ )
- m = the fixed factor 0.035
- $\text{LA}_r$  = the total outstanding loans and advances of the retail banking business line.<sup>24</sup> This amount should be non-risk weighted and gross of provisions, and averaged over the past three years.
- $\text{LA}_c$  = the total outstanding loans and advances of the commercial banking business line.<sup>25</sup> This amount should be non-risk weighted and gross of provisions, and averaged over the past three years.

**Question: We welcome comments on the proposal to allow a Reporting Bank to use ASA to calculate its operational RWA.**

<sup>24</sup> For retail banking, total loans and advances consists of the total drawn amounts in the following credit portfolios: retail, SMEs treated as retail, and purchased retail receivables.

<sup>25</sup> For commercial banking, total loans and advances consists of drawn amounts in the following credit portfolios: corporate, sovereign, bank, specialised lending, SMEs treated as corporate and purchased corporate receivables. The book value of securities held in the banking book should also be included.

**Division 5: Advanced Measurement Approaches**

[MAS will consult on the proposed rules and guidelines relating to this topic at a later date.]

**Annex 9A****MAPPING OF BUSINESS LINES**

<b>Level 1</b>	<b>Level 2</b>	<b>Activity Groups</b>
Corporate Finance	Corporate Finance	Mergers and acquisitions, Underwriting, Privatisations, Securitisation, Research, Debt (Government, High Yield), Equity, Syndications, Initial Public Offerings, Secondary Private Placements
	Municipal / Government Finance	
	Merchant Banking	
	Advisory Services	
Trading & Sales	Sales	Fixed Income, Equity, Foreign Exchanges, Commodities, Credit, Funding, Own Position Securities, Lending and Repurchase Agreements, Brokerage, Debt, Prime Brokerage
	Market Making	
	Proprietary Positions	
	Treasury	
Payment & Settlement <sup>26</sup>	External Clients	Payments and Collections, Funds Transfers, Clearing and Settlement
Agency Services	Custody	Escrow, Depository Receipts, Securities Lending (Customers) Corporate Actions
	Corporate Agency	Issuer and Paying Agents
	Corporate Trust	
Asset Management	Discretionary Fund Management	Pooled, Segregated, Retail, Institutional, Closed, Open, Private Equity
	Non-Discretionary Fund Management	Pooled, Segregated, Retail, Institutional, Closed, Open
Retail Brokerage	Retail Brokerage	Execution and Full Service
Retail Banking	Retail Banking	Retail Lending and Deposits, Banking Services, Trust and Estates
	Private Banking	Private Lending and Deposits, Banking Services, Trust and Estates, Investment Advice
	Card Services	Merchant / Commercial / Corporate Cards, Private Labels and Retail
Commercial Banking	Commercial Banking	Project Finance, Real Estate, Export Finance, Trade Finance, Factoring, Leasing, Lending, Guarantees, Bills of Exchange

<sup>26</sup> Payment and settlement losses related to a Reporting Bank's own activities would be incorporated in the loss experience of the affected business lines.

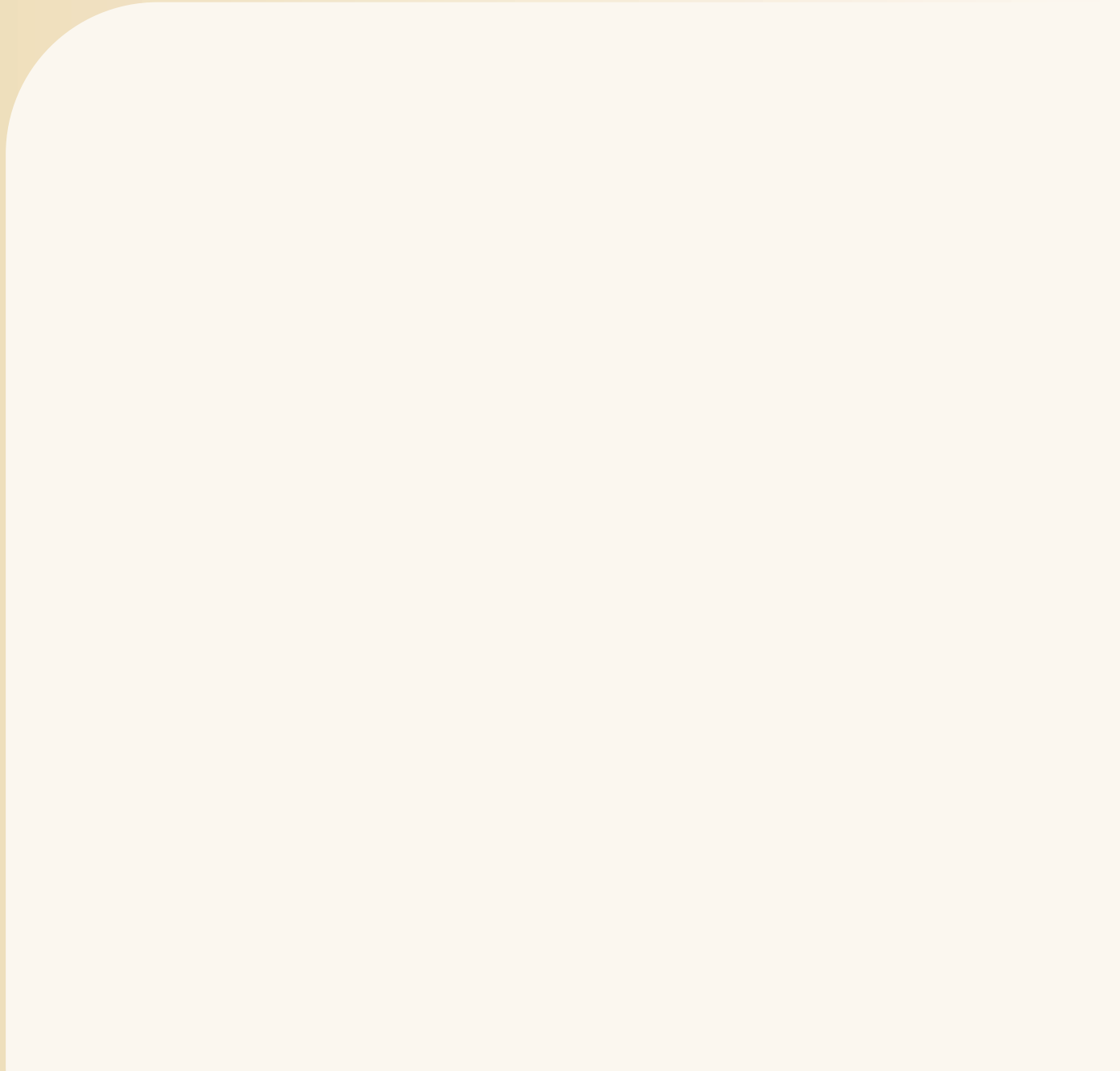
## Appendix C

**SUMMARY OF NATIONAL DISCRETIONS EXERCISED**

<b>Basel II Reference</b>	<b>MAS' Proposal</b>
<p>Paragraph 24. To the greatest extent possible, all banking and other relevant financial activities (both regulated and unregulated) conducted within a group containing an internationally active bank will be captured through consolidation.</p> <p>Paragraph 27. If any majority-owned securities and other financial subsidiaries are not consolidated for capital purposes, all equity and other regulatory capital investments in those entities attributable to the group will be deducted, and the assets and liabilities, as well as third-party capital investments in the subsidiary will be removed from the bank's balance sheet. Supervisors will ensure that the entity that is not consolidated and for which capital investment is deducted meets the regulatory capital requirements.</p>	<p>MAS will implement this national discretion.</p>
<p>Paragraph 25. Supervisors will assess the appropriateness of recognising in consolidated capital the minority interests that arise from consolidation of less than wholly owned banking, securities or other financial entities. Supervisors will adjust the amount of such minority interests that may be included in capital in the event the capital from such minority interests is not readily available to other group entities.</p>	<p>MAS will implement this national discretion.</p>

<b>Basel II Reference</b>	<b>MAS' Proposal</b>
<p>Paragraph 28: The threshold above which minority investments will be deemed significant and be thus either deducted or consolidated on a pro-rata basis is to be determined by national accounting and/or regulatory practices.</p>	<p>MAS will retain the existing 20% threshold in MAS Notice 637 for ascertaining what constitutes a significant minority investment. Capital investments in excess of the 20% threshold will be deducted from regulatory capital.</p>
<p>Paragraph 30: When measuring regulatory capital for banks, the Committee believes that at this stage it is, in principle, appropriate to deduct banks' equity and other regulatory capital investments in insurance subsidiaries and also significant minority investments in insurance entities. Alternative approaches that can be applied, should, in any case, include a group-wide perspective for determining capital adequacy and avoid double counting of capital.</p>	<p>MAS will maintain the existing practice in MAS Notice 637 to require any capital investments held by a bank in an insurance subsidiary to be deducted from regulatory capital.</p>
<p>Paragraph 43: Where the total expected loss amount is less than total eligible provisions, banks may recognise the difference in Tier 2 capital up to a maximum of 0.6% of credit risk-weighted assets. At national discretion, a limit lower than 0.6% may be applied.</p>	<p>MAS will allow banks to recognise the excess provisions as Upper Tier 2 capital up to a maximum of 0.6% of credit risk-weighted assets.</p>

<b>Basel II Reference</b>	<b>MAS' Proposal</b>
Paragraph 49: The Committee believes it is appropriate for supervisors to apply prudential floors to banks that adopt the IRB approach for credit risk and/or the AMA for operational risk following year-end 2008.	MAS will implement this national discretion.
Paragraph 652, Footnote 97: At national supervisory discretion a supervisor can choose to allow a bank to use the Alternative Sandardised Approach (ASA) provided the bank is able to satisfy its supervisor that this alternative approach provides an improved basis by, for example, avoiding double counting of risks.	MAS will implement this national discretion.
Paragraph 654, Footnote 98: At national discretion, supervisors may adopt a more conservative treatment of negative gross income.	MAS will not implement this national discretion, i.e. negative capital charges (resulting from negative gross income) in any business line may offset positive capital charges in other business lines as provided for under paragraph 654.
Paragraph 663, Footnote 101: For other banks (i.e. other than internationally active banks), the criteria set out in paragraph 663 are recommended, with national discretion to impose them as requirements.	MAS will implement this national discretion.



Monetary Authority of Singapore